

REMARKS

Applicants respectfully request consideration of the subject application as amended herein. This Amendment is submitted in response to the Office Action mailed January 16, 2007. Claims 1-6, 8-13, and 15-20 are pending. In this Amendment, claims 1, 8 and 15 have been amended and no new matter is added by the amendments.

Examiner's Interview

Applicants thanks Examiner Korobov for an interview on March 29, 2007 to discuss proposed amendments to the claims. In the interview, Applicants discussed with the Examiner about proposed limitations to the claim. Examiner Korobov was receptive to the proposed limitations and explanations but commented that more clarity is needed to distinguish the proposed limitations from the prior art. Applicants and Examiner Korobov did not come to any definite conclusions but Applicants will take Examiner Korobov's suggestion as advisory and try to add more clarity to the proposed limitations before submitting the response so Examiner Korobov for examination.

Rejections under 35 U.S.C. § 112

Claims 1-6 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as his invention.

Amended independent claim 1 now reads "A method, comprising ..." which renders the claimed subject matter to be distinct and definite. Therefore, Applicant respectfully requests the withdrawal of the claim rejection.

Rejections under 35 U.S.C. § 102

Claims 1-6, 8-13, and 15-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Brandt et al. (U.S. Patent No. 6,009,463).

Independent claims 1, 8 and 15

Independent claims 1, 8 and 15 include the limitation “...wherein the memory buffer is not unique to any protocol software module in any network layer and is commonly shared and accessible to multiple different protocol software modules in different network layers, each of the different protocol software module may include at least one of being developed by a different vendor, having different buffer format or having different buffer lengths ...”

(Emphasis added).

Brandt discloses a cooperative service interface unit with a buffer and lock pool sharing to enhance message-dialog transfer between network provider and distributed system services. Specifically, Brandt describes the use of pointers to different buffers residing on different layers so that information residing on a first layer can be accessed by a second application in a second layer by attaching headers to the buffer (See at least Figures 1, 2, 5 of Brandt). Once the second application is finished with the information, the information is returned to the first layer, this is described in Col. 11 lines 12-15 where “The ownership of buffers shared in this way is later returned to their original owner when the borrower is finished with them.” This eliminates the need for the information to be copied from the first layer to the second layer. In other words, information to be accessed by applications in different network layers involved in implementing a transfer protocol need not be copied in each network layer before transferring the information to a different network layer with the use of headers, but information has to be returned to the layer from which the information

originates.

Further, based on the description, it appears Brandt's disclosure also applies to a system where the different layers or different software modules are of the same vendor. If the different layers are made by different vendors, the buffer formats in different layers will also be different, and if the buffer formats are different, the information cannot be so easily transferred by the use of only header pointers because one application software module will not be able to access a buffer format that is different. In other words, Brandt's disclosure also does not apply to protocol software modules in different layers that are developed by different vendors or having different formats. Therefore, Brandt's disclosure essentially describes a system where the protocol software modules in different layers are developed by a same vendor with a similar buffer format so that only the header pointers are necessary to point to and allow information to be borrowed by a different layer.

In contrast, Applicant's disclosure concerns dealing with a memory buffer or a buffer pool that is commonly shared by different layers (see Figure 1, Buffer MGR 114). In other words, Applicant describes a buffer scheme that is common to all different layers, which is not the same as Brandt's disclosure of having a buffer scheme for each individual layer. Furthermore, Applicant's claim specifically describes this common memory buffer allows information to be shared by protocol software modules in different layers developed by different vendors or having different buffer formats, "... the memory buffer is not unique to any protocol software module in any network layer and is commonly shared and accessible to multiple different protocol software modules in different network layers, each of the different protocol software module may include at least one of being developed by a different vendor, having different buffer format or having different buffer lengths ..." Support can be found in at least page 8 lines 7-20.

Applicant's disclosure in one example applies to receiving, at a machine, a frame of data transmitted over the network and passing control of processing the frame of data up a protocol stack in the machine or down a protocol stack if the data frame is received from a higher network layer application program. However, it should be appreciated that when the existing buffer space allocated for storing the data frame as it is processed by the protocol stack becomes insufficient, additional buffer in the common memory buffer can be allocated and chained to the buffer already provided. However, if the buffers associated with protocol software modules that are not by the same vendor or of the same format, this is not possible. While Brandt fails to disclose this feature, Applicants' disclosure solves this problem because the memory buffer used is not unique to any protocol software module in any network layer and therefore can be commonly shared among different protocol software modules in different network layers (see Figure 1 and page 12 line 12 to page 13 line 7). Lastly, the information is only stored in one location and commonly accessed by all layers, so the information need not be "borrowed and returned" as described in Brandt where buffers are separately residing in different layers.

As such, Applicant respectfully submits that Brandt fails to anticipate each and every limitation as disclosed and respectfully requests withdrawal of the claim rejections.

Dependent claims 2-6, 9-13 and 16-20

Claims 2-6, 9-13 and 16-20 depend from independent claims 1, 8 and 15 and thus incorporate all the limitations contained therein. Applicant respectfully submits that they contain limitations not anticipated by Brandt. For at least this reason, Applicant respectfully submits that the claims are not anticipated by Brandt and respectfully requests the withdrawal of the claim rejections.

CONCLUSION

Applicants respectfully submit that in view of the amendments and arguments set forth herein, the rejections herein have been overcome. Accordingly, it is believed that all claims are in condition for allowance. If the Examiner determines the prompt allowance of these claims could be facilitated by a telephone conference, the Examiner is invited to contact Arthur Au at (408) 720-8300.

Deposit Account Authorization

Authorization is hereby given to charge our Deposit Account No. 02-2666 for any charges that may be due.

Respectfully submitted,

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& ZAFMAN LLP

Dated: 4/5/07



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